Amendment and Reply to Office action of July 2, 2004

Amendments to the Drawings:

Attached are 6 replacement sheets with proper labels, lettering, and margins, to meet the Draftsperson's objections. These contain FIGS 2A-1, 2A-2, 4A to F, 5A, 5B, and 6.

Attachment: replacement sheets

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Remarks/Arguments

In the Specification:

The Abstract has been amended to correct editorial problems that were pointed

out in the Office action.

Paragraph [0050] has been amended to conform to FIGS. 2C and 2D, in

response to the Examiner's objection (Office action pages 2-3, and item 11d on

page 5). No changes are needed to FIGS. 2C and 2D. No new matter has been

added. As to other objections to the specification (Office action page 5), it is

requested that objections or requirements as to form, not necessary to further

consideration of the claims, be held in abeyance until allowable subject matter is

indicated.

Amendment of the specification was discussed with Examiner Robert Stevens

and Supervisory Patent Examiner Joseph Feild in the telephone interview of

September 27, 2004. Also discussed were claim amendments, and questions

concerning enablement, the prima facie case of nonstatutory subject matter, and

the prima facie case of obviousness (see Errors in Rejection below). Examples

were provided to counter the assertions (Office action pages 3 and 7) of technical

problems in FIGS. 5 and 6, and these examples were discussed (see Errors in

Rejection below). No substantive changes are needed to FIGS. 5 and 6, which

are now submitted in the form of replacement sheets with proper labels, lettering,

and margins, as FIGS 5A, 5B, and 6.

In the Claims:

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The claims have been amended in response to the Examiner's objections and rejections. Claim 1 is amended in response to multiple rejections. The amendment adds an element ("recording intermediary information from the first operation and the second operation in a comparison table, stored in a memory of a computer") based on FIGS. 4A-F, FIG. 6 and the written description. This element is not described in the references relied upon by the Office. The amendment should remove any doubt that Claim 1 has allowable subject matter.

The amendment to Claim 1 adds a clause ("for a second operation, again assigning ...") based on FIGS. 5 and 6 and the written description. This is to clarify an item. The Office action at page 8 contains a suggestion that Claims 1-7 were indefinite. The amendment to Claim 1, along with the minor editorial amendment to Claim 4, should remove any doubt that Claims 1-7 are sufficiently definite. Claim 6 is amended to reflect details of Claim 1, and address a problem that was pointed out in the Office action, at page 7.

Errors in Rejection

The assignee respectfully asserts that:

- 1. It was erroneous to reject Claims 1-7 under 35 U.S.C. 101, as being directed to nonstatutory subject matter. A prima facie case of nonstatutory subject matter has not been established.
- 2. It was erroneous to reject Claims 1-7, under 35 U.S.C. 103, over Blood's spreadsheet *equal_val*, in view of Jamsa. A prima facie case of obviousness has not been established.

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3. It was erroneous to reject Claims 1-7 under 35 U.S.C. 112, first paragraph, as being technically incorrect and failing to comply with the enablement requirement. A prima facie case of nonenablement has not been established.

1. Argument regarding 35 U.S.C. 101, utility, and statutory subject matter.

The proper standard for patentable subject matter in computer-related inventions is stated in MPEP 2106 II. A .: "The claimed invention as a whole must accomplish a practical application. That is, it must produce a 'useful, concrete and tangible result.... Office personnel have the burden to establish a prima facie case that the claimed invention as a whole is directed to solely an abstract idea or to manipulation of abstract ideas or does not produce a useful result."

It is clear that a useful, concrete and tangible result is produced by the rejected claims, when these claims are read in light of the specification. In the present patent application, the Office cannot show that the claimed invention as a whole is directed to solely an abstract idea, or to manipulation of abstract ideas, or does not produce a useful result. Thus the Office has not satisfied its burden to establish a prima facie case of nonstatutory subject matter or lacking utility. The Office action at Page 5 appears to assert that method claims need to contain certain physical limitations, that name some technological apparatus. This is not supported by the MPEP or case law.

Argument regarding 35 U.S.C. 103 and lack of a prima facie case of obviousness:

As stated in MPEP 2142: "The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not

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produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." As stated in MPEP 2143 and 2143.03, a requirement for establishing a prima facie case of obviousness is that the reference or references must teach or suggest all the claim limitations.

A. Limitations in the Rejected Claims Which Are Not Described in the References Relied On:

The following language from Claim 1 provides an example (unaffected by amendment):

defining a boolean attribute, said boolean attribute having a first and a second value;

assigning the first value of said boolean attribute to each cell of a first series of cells;

assigning the second value of said boolean attribute to each cell of a second series of cells;

Concerning "boolean attribute," consider an example from the specification of the subject patent application (Page 24, or Paragraph 95 of the published version):

[0095] At step 505, the method sets a temporary attribute TempAttribute of the ASerie object to the value True. Due to the inheritance property of this attribute, this also sets the same value True to the same attribute TempAttribute of each cell belonging to ASerie. Then the method sets the same temporary attribute TempAttribute of the BSerie to the value False. Due to the inheritance property of this attribute, this also sets the same value False to the same attribute TempAttribute of each cell belonging to BSerie.

Nothing like this is described in the references the Office action relies on (Blood's

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spreadsheet equal val, or Jamsa).

B. Why the References, Taken as a Whole, Do Not Suggest the Claimed Subject

Matter:

The cited references do not suggest a solution involving above-quoted subject

matter of rejected Claim 1 for example. Blood's spreadsheet equal_val contains

so little information that it does not suggest anything beyond the one solution that

is shown. The cited material from Jamsa does not suggest anything concerning

above-quoted subject matter of rejected Claim 1.

Rejected Claims 2-7 are not separately argued.

The points made above, concerning Claim 1, also apply to Claims 2-7, which

depend upon Claim 1. Thus a prima facie case of obviousness has not been

established.

Argument regarding 35 U.S.C. 112, first paragraph, and lack of a prima facie

case of nonenablement: As stated in MPEP 2164.04, "the examiner has the

initial burden to establish a reasonable basis to question the enablement provided

for the claimed invention." In this case, the examiner has not established a

reasonable basis to question enablement. The Office action contains only very

brief remarks questioning enablement (Office action pages 3 and 7). A prima

facie case of nonenablement has not been established.

A reasonable view of the specification in this case would include the various

views of Comparison Table 400 in FIG. 4 (now 4A to F), the flow charts of FIGS.

5 and 6 (now 5A, 5B, and 6) and the written description. A reasonable view of the

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specification in this case would include the following points, for example.

To avoid confusion, it should be noted that FIGS. 5 and 6 give two views of the same method. To give a high-level view, according to paragraph 79, the method is summarized in FIG. 6. To give a low-level view, according to paragraph 90, FIG. 5 is a detailed flowchart of the method. The same variable is not initialized multiple times, as asserted by the Examiner. Comparison Table 400 is initialized. This initialization has been described twice, once as part of an "high level" description (Block 604), and once as part of a "low level" description (Block 504).

To avoid confusion concerning Block 506 in FIG 5, it should be noted that the preceding Block 505 involves two separate setting operations, one for the "A" series of cells and one for the "B" series of cells: "the method sets a temporary attribute TempAttribute of the ASerie object to the value True.... Then the method sets the same temporary attribute TempAttribute of the BSerie to the value False." Page 24, or Paragraph 95 of the published version.

It should be noted that at Block 510, the method again sets the temporary attribute TempAttribute of the ASerie object to the value True. See FIGS. 5 and 6 and the written description. A reasonable view of the specification in this case would include this point. The same variable is not initialized multiple times, as asserted by the Examiner.

Assignee respectfully submits that the rejection of Claims 1-7 should be withdrawn, and requests that a timely Notice of Allowance be issued in this case.

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Respectfully submitted,

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Attachments